Appendix A

Toxic Air Contaminant Identification List
June 1996

I. Substances identified as Toxic Air Contaminants by the Air Resources Board, pursuant to the provisions of AB 1807** and AB 2728** (includes all Hazardous Air Pollutants listed in the Federal Clean Air Act Amendments of 1990).

Acetaldehyde
Acetamide
Acetonitrile
Acetophenone
2-Acetylaminofluorene
Acrolein
Acrylamide
Acrylic acid
Acrylonitrile
Allyl chloride
4-Aminobiphenyl
Aniline
o-Anisidine
*Asbestos
*Benzene (including benzene from gasoline)
Benzidine
Benzotrichloride
Benzyl chloride
Biphenyl
Bis(2-ethylhexyl)phthalate (DEHP)
Bis(chloromethyl)ether
Bromoform
*1,3-Butadiene
*Cadmium (metallic cadmium and cadmium compounds)
Calcium cyanamide
Caprolactam
Captan
Carbaryl
Carbon disulfide
*Carbon tetrachloride
Carbonyl sulfide
Catechol
Chloramben
Chlordane
Chlorine
*Chlorinated dioxins and dibenzofurans (15 species)
Chloroacetic acid
2-Chloroacetophenone
Chlorobenzene
Chlorobenzilate
*Chloroform
Chloromethyl methyl ether
Chloroprene
*Chromium VI
Cresols/Cresylic acid (isomers and mixtures)
o-Cresol
m-Cresol
p-Cresol
Cumene
2,4-D, salts and esters
DDE
Diazomethane
Dibenzofurans
1,2-Dibromo-3-chloropropane
Dibutylphthalate
1,4-Dichlorobenzene(p)
3,3-Dichlorobenzidene
Dichloroethyl ether [Bis(2-chloroethyl)ether]
1,3-Dichloropropene
Dichlorvos
Diethanolamine
N,N-Dimethylaniline
Diethyl sulfate
3,3-Dimethoxybenzidene
Dimethyl aminoazobenzene
3,3-Dimethyl benzidene
Dimethyl carbamoyl chloride
Dimethyl formamide
1,1-Dimethyl hydrazine
Dimethyl phthalate
Dimethyl sulfate
4,6-Dinitro-o-cresol, and salts
2,4-Dinitrophenol
2,4-Dinitrotoluene
1,4-Dioxane (1,4-diethyleneoxide)
1,2-Diphenylhydrazine
Epichlorohydrin (1-chloro-2,3-epoxypropane)
1,2-Epoxybutane
Ethyl acrylate
Ethyl benzene
Ethyl carbamate (urethane)
Ethyl chloride (chloroethane)
*Ethylene dibromide (dibromoethane)
*Ethylene dichloride (1,2-dichloroethane)
Ethylene glycol
Ethylene imine (aziridine)
*Ethylene oxide
Ethylene thiourea
Ethylidene dichloride (1,1-dichloroethane)
*Formaldehyde
Heptachlor
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Hexamethylene-1,6-diisocyanate
Hexamethylphosphoramide
Hexane
Hydrazine
Hydrochloric acid
Hydrogen fluoride (hydrofluoric acid)
Hydroquinone
*Inorganic arsenic
Isophorone
Lindane (all isomers)
Maleic anhydride
Methanol
Methoxychlor
Methyl bromide (bromomethane)
Methyl chloride (chloromethane)
Methyl chloroform (1,1,1-trichloroethane)
Methyl ethyl ketone (2-butanone)
Methyl hydrazine
Methyl iodide (iodomethane)
Methyl isobutyl ketone (hexone)
Methyl isocyanate
Methyl methacrylate
Methyl tert butyl ether
4,4-Methylene bis(2-chloroaniline)
*Methylene chloride (dichloromethane)
Methylene diphenyl diisocyanate (MDI)
4,4-Methylenedianiline
Naphthalene
*Nickel and nickel compounds
Nitrobenzene
4-Nitrobiphenyl
4-Nitrophenol
2-Nitropropane
N-Nitroso-N-methylurea
N-Nitrosodimethylamine
N-Nitrosomorpholine
Parathion

Pentachloronitrobenzene (Quintobenzene)
Pentachlorophenol
Phenol
p-Phenylenediamine
Phosgene
Phosphine
Phosphorus
Phthalic anhydride
Polychlorinated biphenyls (aroclors)
1,3-Propane sultone
beta-Propiolactone
Propionaldehyde
Propoxur (Baygon)
Propylene dichloride (1,2-dichloropropane)
Propylene oxide
1,2-Propylenimine (2-methyl aziridine)
Quinoline
Quinone
Styrene
Styrene oxide
2,3,7,8-Tetrachlorodibenzo-p-dioxin
1,1,2,2-Tetrachloroethane
*Tetrachloroethylene (perchloroethylene)
Titanium tetrachloride
Toluene
2,4-Toluene diamine
2,4-Toluene diisocyanate
o-Toluidine
Toxaphene (chlorinated camphene)
1,2,4-Trichlorobenzene
1,1,2-Trichloroethane
*Trichloroethylene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Triethylamine
Trifluralin
2,2,4-Trimethylpentane
Vinyl acetate
Vinyl bromide
*Vinyl chloride
Vinylidene chloride (1,1-dichloroethylene)
Xylenes (isomers and mixture)
m-Xylenes
o-Xylenes
p-Xylenes
o Antimony Compounds
o Arsenic Compounds (inorganic including arsine)
o Beryllium Compounds
o Cadmium Compounds
o Chromium Compounds
o Cobalt Compounds
o Coke Oven Emissions
o Cyanide Compounds[1]
o Glycol Ethers[2]
o Lead Compounds
o Manganese Compounds
o Mercury Compounds
o Fine Mineral Fibers[3]
o Nickel Compounds
o Polycyclic Organic Matter[4]
o Radionuclides (including radon)[5]
o Selenium Compounds

* Substances which have already been identified by the Board as TACs and which have potency numbers developed by the OEHHA and SRP.

** AB 1807, Statutes 1983, chapter 1047, Health & Safety Code sections 39650 et. seq.
AB 2728, Statutes 1992, chapter 1161, Health & Safety Code sections 39655 et. seq.

II. Substances currently under review or nominated for review for identification as Toxic Air Contaminants.

A. Substances already in the review process.

Diesel exhaust
Inorganic lead

B. Substances nominated for review.

Dialkylnitrosamines
Environmental Tobacco Smoke

III. Substances which are being evaluated for entry into Category II (IIA or IIB). Factors considered in this evaluation include carcinogenic and noncarcinogenic health effects, emissions and exposure in California.

Aluminum
Ammonia
Ammonium nitrate
Ammonium sulfate
Barium compounds
Benzoyl chloride
Bis(2-ethylhexyl)adipate
Bromine compounds (inorganic)
Butyl acrylate
Butyl benzyl phthalate
Carbon black extracts
Chlorinated fluorocarbons
Chlorine dioxide
Chlorophenols
Copper compounds
Creosotes
Crystalline silica
Cumene hydroperoxide
Cyclohexane
Decabromodiphenyl oxide
Diaminotoluene (mixed isomers)
Dicofol
Gasoline vapors
Glutaraldehyde
Hexachlorocyclohexanes
Hydrogen sulfide
Isopropyl alcohol
4,4'-Isopropylidenediphenol
Molybdenum trioxide
n-Butyl alcohol
Nitric acid
Nitrilotriacetic acid
Peracetic acid
2-Phenylphenol
Phosphoric acid
Propene
sec-Butyl alcohol
Silver Compounds
Sodium hydroxide
Sulfuric acid
Terephthalic acid
tert-Butyl alcohol
Thiourea
1,2,4-Trimethylbenzene
Zinc Compounds

Note: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e, antimony, arsenic, etc.) as part of that chemical's infrastructure.

[1] X'CN where X=H' or any other group where a formal dissociation may occur. For example, KCN or $Ca(CN)_2$

[2] includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol ($R(OCH_2CH_2)_n$ -OR' where
n = 1,2 or 3
R = alkyl or aryl groups
R = R,H, or groups which, when removed, yield glycol ethers with the structure; $R(OCH_2CH)_n$-OH. Polymers are excluded from the glycol category.

[3] includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

[4] includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100° C.

[5] a type of atom which spontaneously undergoes radioactive decay.